



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,908	06/15/2006	Gert Stauch	034193-036	6072
21839 7590 10/02/2008 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404				
EXAMINER GANEY, STEVEN J				
ART UNIT 3752		PAPER NUMBER		
NOTIFICATION DATE 10/02/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary

Application No.

10/560,908

Applicant(s)

STAUCH ET AL.

Examiner

STEVEN J. GANEY

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 6 is/are rejected.
- 7) ☒ Claim(s) 3, 5 and 7-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Receipt is acknowledged of the amendment filed on June 23, 2008, which has been fully considered in this action.

Claim Objections

2. Claims 5, 7-9, 11-18, 20, 25, 26, 29 and 30 are objected to because of the following informalities: In claims 5 and 7-9, line 3, the word “an” should be replaced with --the at least one-- in order to maintain proper antecedent basis and remove any double inclusion issues. Claim 11, line 2, the numeral “1” should be replaced with the numeral --10--, in order to provide proper claim dependency and antecedent basis for “the at least one directing-air distribution device”. Claims 12-14, line 2, the numeral “1” should be replaced with the numeral --10--, in order to provide proper claim dependency and antecedent basis for “the passages”. Claim 15, line 2, the numeral “1” should be replaced with the numeral --10-- in order to provide proper claim dependency and antecedent basis for “the directing air flows”. Claims 16-18 and 20, line 2, the numeral “1” should be replaced with the numeral --10--, in order to provide proper claim dependency and antecedent basis for “the at least one directing-air distribution device”. Claim 25, line 3, the phrase “distributing elements are” should be changed to --distributor element is--to maintain proper antecedent basis and since only a single “first distributor element” is recited in claim 23, not a plurality. Claim 26, line 2, the numeral “1” should be replaced with the numeral --23--, in order to provide proper claim dependency and to clearly define the invention since “a first distributor element” is positively recited in claim 23. Claim 26, lines 3 and 5, the word

“distributing” should be changed to --distributor-- to clearly define the invention and coordinate with the specification. Claim 27, line 4, the word “distributing” should be changed to --distributor-- to clearly define the invention, coordinate with the specification and maintain antecedent basis. Claim 29, line 2, the numeral “1” should be replaced with the numeral --2-- or the numeral --11--, in order to provide proper claim dependency and antecedent basis for “pieces of pipe”. Claim 30, line 3, the phrase “at least one device for air distribution” should be changed to --the at least one air distribution device-- in order to maintain proper antecedent basis and remove any double inclusion issues. Claim 30, line 4, the phrase --at least one-- should be inserted before the phrase “air distribution device” in order to maintain proper antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirchhofer.

Kirchhofer discloses an ultrasonic standing-wave atomizer arrangement for producing a mist comprising all the featured elements of the instant invention, note specifically sonotrode 4 and component 15 forming a standing ultrasonic field 17 in an intermediate space 7 there between; liquid feeding device 2 at a discharge point in the intermediate space; and air supply

device 6 which interacts with at least one air distribution device comprising pipe/tube 21/22 with a number of clearances 8 which blow out air, which provides a blocking air flow, see column 4, lines 19-25 and lines 59-64, except for the device being used for spraying paint, the clearances configured as round nozzles and that the thickness of the air flow can be empirically determined. See Figure 2. It would have been obvious to one having ordinary skill in the art at the time the invention was made to spray paint from the device of Kirchhofer, since Kirchhofer discloses that the device is for atomizing a liquid and since paint is a liquid the apparatus of Kirchhofer would be capable of atomizing paint also.

As to the shape of the clearances, the apertures 8 of Kirchhofer could be configured in the shape of a round nozzle, since such a modification is merely a matter of obvious design choice and the apparatus of Kirchhofer would perform equally as well with round nozzles or the apertures as disclosed.

As to the thickness of the air flow being empirically determined, the apparatus of Kirchhofer shows the air distribution device being at a distance from the discharge point and the sonotrode and from the component such that a thickness of air flow is obtained and would be capable of being empirically determined by designing the device to locate the position of the air distribution device 21/22 or sonotrode/component 4/15 to be at different heights/levels.

Allowable Subject Matter

5. Claims 3, 5 and 7-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments, see pages 1-4, filed June 23, 2008, with respect to the rejection(s) of claims 1-4, 11 and 12 under 35 U.S.C. 102(b) as being anticipated by Bauckhage et al have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kirchhofer.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN J. GANEY whose telephone number is (571)272-4899. The examiner can normally be reached on 9:00-5:00; Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on 571-272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven J. Ganey/
Primary Examiner
Art Unit 3752

sjg